In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 9 of 14

REMARKS

Claims 1-35 are pending. Claims 1, 23, 27, 32, 33, 34 and 35 are in independent form. Claims 23, 27, 33 and 35 have been amended.

Support for the amendments to claims 23, 33 and 35 can be found, for example, at paragraphs 0037, 0039 and 0040 of applicants published patent application, U.S. Pat. Pub. No. 2002/0046284.

Support for the amendment to claim 27 can be found, for example, at paragraph 0041 of applicants published patent application, U.S. Pat. Pub. No. 2002/0046284.

Claims 1-7 and 9-35 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,765,909 to Sen et al. (hereinafter, Sen). Claim 8 stands rejected under 35 U.S.C. §103(a) as being obvious in view of Sen.

Independent Claims 1, 32, and 34 are Patentable

Claims 1, 32 and 34 are directed to a method, system and computer program product and include similar recitations. Therefore, the arguments set out herein are directed with particular reference to claim 1, but apply analogously to claims 32 and 34.

According to the M.P.E.P. §706.02, in order to be anticipating under §102, the reference must teach every aspect of the claimed invention[1]. It is the applicants' position that Sen fails to teach or suggest:

> ... providing transaction service level information for a data transmission transaction to a communication process executing on a data processing system from an application executing on the data processing system requesting the data transmission transaction, wherein the transaction service level information is provided separate from content data for the data transmission transaction ...

---

[1] *Carella v. Starlight Archery and Pro Line Co.*, 804 F.2d 135, 138 (Fed. Cir. 1986).

In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 10 of 14

Sen does not discuss applications or communications processes of a data processing system as claimed. Rather, Fig. 1 of Sen illustrates a broad block diagram of data processing systems, which are referred to as "users" 102, 110, as well as "equipment" 104, 108 and the Internet 106, where "users" are described as devices capable of communicating on the Internet, and "equipment" are described as transmitting and receiving towers, base station controllers, mobile switching center, etc., for connecting wireless users to the Internet[2].

Sen also tangentially mentions the term "applications". However, it appears that Sen is referring to "applications" in the general sense, i.e., the reason for using the wireless network, e.g., voice over IP, web browsing etc. For example, Sen refers to TCP/IP "applications" as being FTP, Telnet, SMTP, HTTP, etc., and provides a table in the specification listing the corresponding TCP port numbers for these "applications"[3]. However, there is no description of any applications or communication process executing on each data processing "users" 102 110, other than a general indication of the "users" being wired or wireless.

Moreover, Sen is completely silent with regard to, and fails to teach or suggest, providing transaction service level information from an application to a communication process, which is executing on the same data processing system as the application. There is no description, for example, of applications executed on the users 102, 110, providing transaction service level information for a data transmission transaction to a communication process that is also executing on that same user. Still further, Sen is completely silent with regard to, and fails to teach or suggest, providing transaction service level information separate from context data for the data transmission transaction.

Sen further fails to teach or suggest:
determining a quality of service level associated with a data transmission transaction based on transaction service level information received by a communication process from an application.

---

[2] See for example, Sen, Col. 4, lines 6-14.
[3] See for example. Sen, Col. 5, lines 45-55.

In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 11 of 14

Sen is related to a wireless quality of service architecture provided in a wireless system Base Station controller (BSC) having a quality of service adaptation sublayer (QAS) 206 that directs Internet protocol/Point to point protocol (IP/PPP) packets to one of the LAC/MAC classes, where each class has a different support level of Quality of service (QoS). The QAS is implemented by a network process between a router and base station. As noted in Sen:

> ...A signal is transmitted over a Packet Data Service node *(router)* from a connected IP network in the form of IP/PPP data packets 202. (emphasis added)[4]

> ... Following the progress of IP/PPP packet 202 as it moves from the IP network to a receiving device, packet 202 is *routed* to BSC 207 *[ed. note- BSC is a Base Station Controller]* via QoS Adaptation Sublayer (QAS) 206. (emphasis added)[5]

> ...The process begins with step 600, which is depicts a signal being transmitted, either from a network or from a wireless device. The process passes to step 602, which illustrates the signal being received, in the form of a PPP packet, into the classifier. *[ed. note- the classifier is part of the QAS 206, as best seen in Fig. 4]* If the signal is "from the air," meaning *transmitted to a BTS* from a device not on the network, *the signal is classified* and passed through the appropriate LAC/MAC and sent onto the network. If the signal is "to the air" meaning *a signal received into the Base Station* from the network, *the signal is classified* and passed through the LAC/MAC and sent to the target device. (emphasis added)[6].

Thus, in Sen, the QoS is established by the QoS Adaptation Sublayer (QAS) as the packets move between a router and the base station controller[7].

Moreover, in Sen, the QoS level is determined by reading the TCP Port header information in IP/PPP packets. As noted in Sen, only one TCP flow can be active at any time. Thus, the classifier (which is part of the QAS), decodes the connection number field in the TCP/IP header 402 to determine the active flow. As different TCP flows become active, the classifier compares the value in the connection number field to values in a table. If a match is found, the QoS plane associated with the connection number is applied to the packet[8]. However,

---

[4] See for example, Sen, Col. 4, lines 26-31.
[5] See for example, Sen, Col. 4, lines 31-39.
[6] See for example, Sen, Col. 6. lines 46-59.
[7] See for example. Sen, Col. 4, lines 26-39; See also, Fig. 2.
[8] See for example, Sen, Col. 6, lines 7-13

In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 12 of 14

if the connection number is a new connection number, the classifier utilizes the source port number in the TCP header to determine the application type and QoS requirements, and a new packet data flow identification is then added to the connection number table[9].

Sen does not teach or suggest that the QoS level is based on transaction service level information received from an application. Rather, Sen suggests that the QoS is *specifically not determined* based upon transaction service level data. As noted above, the QoS is set based upon header information read from the IP/PPP packets that are either received from the air at the base station controller, or have been routed from a network to the base station controller. Each TCP port is assigned the same QoS level[10], and thus the QoS in Sen *cannot* be associated with a data transmission transaction based on the transaction service level information received from the application, as each application that uses the same port will be assigned the same service level independent of the nature of the transaction.

The system taught in Sen is network-based (as contrasted with endpoint, e.g., server or client based) and utilizes TCP/IP ports to differentiate types of service. However, such an approach may fail to integrate desired transactional priorities. As an example, in Sen, all HTTP (web browser) packets would get the same QoS because they are all from the same TCP Port (Port 80 or 443 if SSL communications are being used). However, this wholly fails to differentiate different types of web-based transactions that require different service levels, e.g., in Sen, all downloads, browses and business transactions are managed at the same priority level.

At least for the above reasons, the applicants respectfully assert that claims 1, 32 and 34 and the claims that depend there from are patentable over Sen. Therefore, the applicants respectfully request that the rejections under 35 U.S.C. §102(e) be withdrawn. Claim 8 depends from claim 1. Therefore, the applicants further respectfully request that the rejection to claim 8 under 35 U.S.C. §103 be withdrawn.

---

[9] See for example, Sen. Col. 6, lines 13-37.
[10] See for example, Sen, Col. 5, line 42-Col. 6, line 38.

In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 13 of 14

Independent Claims 23, 33, and 35 are Patentable

Claims 23, 33 and 35 are directed to a method, system and computer program product and include similar recitations. Therefore, the arguments set out herein are directed with particular reference to claim 23, but apply analogously to claims 33 and 35.

Sen fails to teach or suggest, as amended herein:

...providing an application program interface to a communications process of an endpoint node, which both receives content data to be transmitted by the communication process and receives quality of service information associated with the data to be transmitted so as to establish the quality of service level for the transmission of the received content data without reference to the contents of the received content data to be transmitted.

The portions of Sen that were cited and relied upon by the Examiner in raising the rejection of the above claims[11] do not even mention an application program interface to a communications process as claimed. Moreover, Sen is completely silent with respect to, and fails to teach or suggest, an application program interface, a communication process or any other aspects of endpoint nodes. Sen further fails to mention or even discuss a communications process that receives both content data and quality of service information.

At least for the above reasons, the applicants respectfully assert that claims 23, 33 and 35 and the claims that depend there from are patentable over Sen. Therefore, the applicants respectfully request that the rejections under 35 U.S.C. §102(e) be withdrawn.

Independent Claim 27 is Patentable

With specific reference to claim 27, as amended herein, Sen fails to teach or suggest "...a send message application program interface configured to receive content data from at least one application to be transmitted and quality of service information separate from the content data to

---

[11] See the Office action Mailed 08/24/2006, pages 4-5, paragraph 11.

In re: Brabson et al.
Serial No.: 09/760,975
Filed: January 16, 2001
Page 14 of 14

be transmitted ...a policy service module configured to determine a quality of service level based on the quality of service information..."

Sen fails to teach or suggest a send message application program interface at all. Sen is completely silent with respect to, and fails to teach or suggest a send message application program interface configured to receive content data from at least one application. As noted above, no aspect of Sen teaches or suggests any interaction with applications. Moreover, no aspect of Sen teaches or suggests any applications program interface as claimed.

At least for the above reasons, the applicants respectfully assert that claim 27 and the claims that depend there from are patentable over Sen. Therefore, the applicants respectfully request that the rejections under 35 U.S.C. §102(c) be withdrawn.
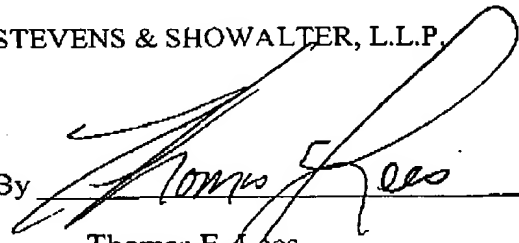
CONCLUSION

In light of the above discussion and amendments, applicants submit that the present application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,

STEVENS & SHOWALTER, L.L.P.

By _____

Thomas E. Lees
Reg. No. 46,867

7019 Corporate Way
Dayton, OH 45459-4238
Telephone: 937-438-6848
Fax: 937-438-2124
Email: tlees@sspatlaw.com